•	
	Home: Overview of Wi-Cancer
•	<u>Wi-Meltdown</u>
	The Cancers of Hi-Tech
•	Kill Zones USA
•	The Sci-Fi of Wi-Fi
•	Don't Do the DECT
	Dead Peasants!
•	Huh?
	<u>Wi-Eyes</u>
•	
	In the News
	<u>Listen to the Music</u>
•	<u>Wi-bestos</u>
•	Wi-Flesh Rising
•	Print and Share
	Antenna Sickness 2017

Professor Dariusz Leszczynski, professor of biochemistry and biotechnology at the University of Finland, Helsinki: "Cell phone users are seriously misled when buying cell phones. They assume that this product was safety checked before it was put on the market. They assume that it is safe to use. But these assumptions might be wrong. Cell phones were not tested for their safety before they were put on the market years ago.....There has been a lack of funding for studies to examine non-thermal effects in human volunteers....The model used by scientists to determine radiation distribution in human brain consists of a plastic mold in a form of half head that is filled with water solution of salt and sugar. Scientifically, it is an absolutely ridiculous model....Safety standards are inadequate to protect users." [1]

BioInitiative Report 2012, a meta-analysis of scientific studies documenting biological damage from the radiation used for wireless technologies, including cell phones: "That brain tumors should be revealed in epidemiological studies at ONLY ten or more years is significant; X-ray and other ionizing radiation exposures that can also cause brain tumors take nearly 15-20 years to appear, making radio-frequency/microwave radiation from cell phones a very efficient cancer-causing agent." [2]

Dr. Devra Davis, scientist and oncologist: "There's almost no environmental exposure that we know that causes an increase [of brain cancer] in the population within ten years--not tobacco, not asbestos, not vinyl chloride. The fact that some studies have found a double or more increase in brain tumors of highly exposed users of cell phones I think is worrisome...Think about the history of tobacco, asbestos and hormone replacement therapy. Can anyone seriously suggest that we acted appropriately when discussing the danger in those cases? In fact, only after overwhelming human tragedy mounted was action finally taken." [3]

The Scourge of Wi-Technologies: Tumors and Cancer



In 1982 and 1983, when the Federal Communications Commission (FCC) gave the fledgling Wireless Radiation Industry approval for construction of cellular tower antennas, and approval for the marketing of mobile phones, there was no premarket testing to ensure that in-your-face microwave technologies would be safe for human health. The profit-driven decisions

to unleash microwave technologies upon the uninformed public were made solely by corporate radio engineers and by political appointees at the FCC, all with an uncanny nose for booty. Despite numerous published studies from Soviet and US military scientists documenting severe biological hazards associated with non-thermal microwave radiation, the FCC's decisions were neither hindered nor tempered by the potential for a public health disaster.

The first consumer mobile phone was sold in the US on March 1984 for \$3,995. It was a Motorola DynTAC 8000X which pumped powerful waves of modulated (information-bearing) microwave radiation into the ear canal, the skull and the eye tissues of the person speaking through the device. Then, as now, public exposure and emissions guidelines were not biologically-based, but formulated to accommodate military-industrial profit and convenience.

By the early 90s, cell phone cancer lawsuits were already making the news. Since those early days, no American consumer has ever been provided with adequate radiation health warnings on cell phone packaging. For the last 32 years, Americans have been left to experiment with powerful microwave radio equipment well-documented to: short-circuit brain function, impair hearing, gradually destroy eyesight, cause severe genetic damage and induce cancer. Meantime, the Wireless Radiation Industry has accumulated enough wealth to buy this planet--and others like it.

Finally in May 2016:
the <u>first</u> federally-funded, peer-reviewed cell phone study
reported a statistically significant incidence of two types of tumors
induced in rats exposed to
modulated microwave radiation emitted by mobile phones

A preliminary report from the National Toxicology Program (NTP) lists two types of tumors found in these microwaved rats: glioma brain tumor and malignant schwannoma of the heart. In addition to the rats that developed tumors, others developed pre-cancerous hyperplasia cells which can evolve into malignant tumors. An astronomical 8.5 percent of the exposed animals developed cancerous or precancerous cells. Many irradiated animals that had not yet developed cancer by the end of the study period were "sacrificed" before the end of their normal lifespan. Non-irradiated rats comprising the control group developed no cancers. [4]

The rats used in this study were microwaved with 900 megahertz cell phone radiation for up to nine hours a day, spread over the course of the day. Ironically, a 2014 Baylor University study published in the *Journal of Behavioral Addictions* confirmed that American college students now immerse themselves in multiple frequencies of wireless radiation from numerous devices for an average of eight to ten hours per day. [5] Along with perpetual exposure to wireless device carcinogen, all Americans are continuously infused with microwave radiation from: cell tower and rooftop antennas, small-cell antennas mounted in and on buildings, ubiquitous Wi-Fi generators and smart utility meters. The robotic addiction of American youth to wireless technologies, their obsession with social media and digital games makes it impossible for them to care about the inevitable health consequences of perpetual exposure to a potent carcinogen.



♦ In 2011, RF/microwave radiation used for wireless technologies was classified as a Category 2B (possible) carcinogen by the International Agency for Research on Cancer (IARC), an agency of the World Health Organization. This is a fact documented on many pages at this site.

♦ By 2013, leading cancer researchers had confirmed that microwave radiation used for wireless devices and systems meets all established criteria needed to upgrade it to a confirmed carcinogen (Category 1A), the same as ionizing X-radiation and gamma waves from nuclear fallout. Current RF/microwave exposure guidelines need to be "urgently revised," according to these experts who itemized the facts in their 2013 scientific paper published in *Reviews on Environmental Health*. [6]

♦ In 2015, nine scientist at Jacobs University in Bremen, Germany, published replication studies showing that animals exposed to microwave radiation, like that emitted by cell phones and the 600,000+ cell towers across America, suffered a significantly higher incidence (than non-irradiated animals) of lung cancer, liver cancer and lymphoma cancer. These scientists were able to induce animal cancers at power densities four to forty times lower than the SAR (specific absorption rate) of radiation emitted by commercial cell phones. Since test animals share similarities to human biology, these researchers stated that their replication studies "may help to understand the repeatedly reported increased incidences of brain tumors in heavy users of mobile phones." [7]

Researchers across the globe will continue to demonstrate that wireless radio frequencies and microwaves --propagated everywhere at very low, non-thermal power levels -- can efficiently:

Initiate a variety of tumors

Promote the growth of tumors

Increase the aggression of malignant tumors

The millions of environmental microwave antennas that infuse our cities, homes, schools and workplaces with numerous frequencies of pulsing microwave radiation, along with the zillions of wireless communications devices sold to US consumers for on-the-body use, are currently linked to these specific types of human tumors and cancers:

Breast Tumors

Glioma Brain Tumors

Meningioma Brain Tumors

Pituitary Tumors (brain)

Acoustic Neuroma Tumors (ear)

Parotid Gland Tumors (mouth)

Thyroid Tumors

Eye Tumors

Melanoma and Other Skin Cancers

A Brief Historical Overview



In 1990, citing numerous animal and human studies, scientists with the Environmental Protection Agency (EPA) recommended that RF/microwave radiation be designated as a probable carcinogen. [8] Before it could make this designation official, the EPA was forced by vested interests in government and industry to stand down and "shut up." [9] The Wireless Radiation Industry and its FCC partners were just then accelerating the nationwide microwave antenna build-out and revving up mass mania for wireless phones. EPA was therefore not allowed to interfere with a massively lucrative project destined to saturate the US environment with carcinogenic wave radiation. Because EPA was sent to the closet, to this day the US has no federally-mandated radio-frequency standards. And all US regulatory and health agencies remain muzzled on the documented carcinogenicity of pulsed microwave radiation propagated both indoors and outdoors to accommodate wireless technologies.

The fact that cell phone microwaves inflict the same horrific damage to human DNA as X-radiation was confirmed by the 2004 REFLEX studies, funded by the European Union. [10] REFLEX demonstrated that Wi-devices, which Americans are taught from infancy to literally worship, are the equivalent of personal X-ray machines sold for unrestricted use. A double-blind medical study published in the *Indian Journal of Human Genetics* analyzed DNA in blood and buccal (mouth) tissues of people who use their cell phone from one to several hours a day. The control group had never used cell phones at any time.

Cell phone users showed an average of 39.75 percent of their cells with DNA damage compared to four percent in the non-cell phone users. [11] A 2012 study confirmed that only fifteen minutes of 900 megahertz from GSM cell phones increased DNA strand breakage in human hair root cells. [12]

An advanced method of looking at DNA strand breakage from Wi-radiation was developed by Dr. N. P. Singh at the University of Washington. This method is called the comet assay because it shows "comet tail" fragments of DNA damage. In the 1990s, Dr. Singh and Dr. Henry Lai used the comet assay method in rat experiments to show that microwave radiation, now used for both cell phone technology and for Wi-Fi, quickly obliterates the DNA of living cells. [13] As a celebrated scientist with years of genetic and bioenergetics research, Dr. Lai, tells us this: "....Critical genetic mutations in one single cell are sufficient to lead to cancer." [14] Equally concerning is recent scientific research showing that microwave radiation from wireless technology can drastically impair the body's ability to repair damaged DNA. [15]

While REFLEX scientists used a microwave power density of only 1.3 watts per kilogram to obliterate human DNA in 24 hours, US federal regulators currently allow cell phone manufacturers to pump at least 1.6 watts per kilogram into the bodies and brains of American wireless device users. In addition, this "legal" power density is exceeded during peak radiation bursts from all wireless devices. As a matter of interest, people are reporting that their Quanta Monitor app reveals that smart phones highly exceed the legal SAR limit and the SAR information that comes with the phones.

Both the Federal Communications Commission (FCC) and the Food and Drug Administration (FDA) have long been aware that US exposure guidelines for RF/microwave leave people open to significant DNA and chromosome damage. These agencies are also aware that, per the current formula for margin of safety, maximum human microwave exposure should be reduced by at least 25 times to .004 watts per kilogram. "What this means for cell phone users is that the phones they are holding against their heads may well be operating in a dangerous range," reports Dr. George Carlo, former head of the Wireless Technology Research (WTR) team which made cell phone safety information available to US regulators in the late 1990s. [16]

In addition to unsafe federal exposure guidelines: "A new report suggests that 97 percent of Americans are exposed to cell phone radiation levels well above the Federal Communications Commission limit. The FCC underestimates the amount of radiation that people who carry cell phones are exposed to, according to the study published in the *Journal of Electromagnetic Biology and Medicine*....The authors report that 97 percent of the population, especially children, will exceed the certified level of absorbed radiation when they hold a cell phone up to their ear." [17]

Part of the reason for such dangerous over-exposure is the fact that FCC condones power averaging of cell phone exposures to conceal dangerous power spikes: "With modern technologies, which can produce a transmission pattern of millisecond pulses—and all smart meters and cell phones do this—a device can emit pulses which at their peak far, far exceed the FCC upper limit, yet when averaged, will appear to comply with it, even be far below it." [18]

By deliberate design, there is little-to-no US funding for adequate investigation of the carcinogenicity of wireless technologies. The 2016 NPT study is too little too late. This project looked only at radiation frequencies and modulations that are used by the older generation wireless devices, that is, 900 megahertz using GSM and CDMA modulation technologies. No federal studies have been done on the more complex and powerful 4G LTE technologies which deploy microwave frequencies in the 700-800 megahertz and the 2.1 to 2.6 gigahertz frequency realms. Medical science has had no time to investigate the true bio-impacts of the 4G modulation techniques, including direct-sequence spread spectrum and multi-carrier orthogonal frequency-division multiplexing (OFDM) which are used for Wi-Fi, smart phones and tablet technologies. OFDM signals include dozens of subcarriers (streams of data) and a variety of modulations (pulse patterns) which can be applied to each subcarrier.

In addition, it will be decades before scientists can fully investigate the biological hazards of the FCC's upcoming 5G orgy, with its mega-millions of new micro antennas scheduled to unleash:

<u>28-37 gigahertz</u> millimeter waves for licensed use 64-71 gigahertz millimeter waves for unlicensed fun and games [19]

Meantime, the fabulously wealthy wireless radiation industry funds and sponsors numerous dead-end studies, carefully crafted to keep the masses confused and sedated, while casting doubt on valid independent research. Those with conflicted interest in Wi-technologies will never produce meaningful or reliable health data. Wireless technologies generate \$billions in sales and tax revenues for vested interests. The medical treatment for tumors and cancer generates \$billions in profits for vested interests. Therefore, vested interests have *everything to gain* by preserving this status quo:

- ♦ In 2010, the President's Cancer Panel admitted that approximately 41 percent of Americans will be diagnosed with cancer in their lifetime and about 21 percent will die of cancer. [20]
- ♦ The number of people in the US living beyond a cancer diagnosis was 14.5 million in 2014 and is expected to rise to about 19 million in 2024. [21]
- ♦ During 2016, an estimated 1,685,210 Americans will receive a new cancer diagnosis and another 595,690 will die of the disease. This ACS figure for new cancer cases in 2016 <u>does not include</u> tens of thousands of new, non-invasive carcinomas and millions of new cases of basal and squamous cell skin cancers. [22]
- ◆ Cancer is the leading cause of death by disease for American children under age 20. [23]
- ♦ Cancer is expected to increase by 45% and become the number one US killer by 2030. [24]

In order to glean up-to-date information on the increasingly obvious connections between personal microwave devices and America's raging cancer epidemic, concerned Americans must rely on independent studies, mainly available from Europe and Asia. Here is what we know at least about the connections between cancer and the older microwave technologies:

BREAST CANCER

Despite massive research and hype over many decades, the US remains deeply mired in a breast cancer epidemic. In 2016, there will be an estimated 246,660 new cases of female breast cancer and 2,600 new cases of male breast cancer, for a total of 249,260 new cases diagnosed. There will be an estimated 40,890 deaths from breast cancer in 2016. [25]

In 1960, one in 14 women developed breast cancer. Today the number is one in eight. The rate of invasive breast cancer in young women 29 to 35 years old has doubled since 1976. [26] The picture below shows how aggressive this disease can be and why millions of women end up with a mastectomy in a desperate effort to stop its progression and metastasis. Because Wiradiation has the potential to initiate and promote the growth of breast cancer, this picture should be on the packaging of all Wi-devices, along with adequate medical warnings.



Medical science reveals that there are many intertwining paths to the several varieties of breast cancer including: genetics, microbes, toxic chemicals and hormone disturbances. Now there is evidence that *Wi-radiation may be a ''race track'' to this disease*. For the last twenty years, millions of American girls and women have cultivated an intimate relationship with their

cordless and mobile phones. Many keep these wireless devices on their bodies continually, believing that instant connectivity equals safety. It turns out that this Wi-habituation may be suicide.

In late 2013, six medical experts, representing five prestigious California medical establishments, published a paper on young women who developed invasive breast cancer after prolonged exposure to their cell phones: "We report a case series of four young women --ages from 21 to 39-- with multi-focal invasive breast cancer that raises the concern of a possible association with non-ionizing radiation of electromagnetic field exposures from cellular phones. All patients regularly carried their smart phones directly against their breasts, in their brassieres for up to 10 hours a day, for several years, and developed tumors in areas of their breasts immediately underlying the phones....Pathology of all four cases show striking similarity. These cases raise awareness to the lack of safety data of prolonged direct contact with cellular phones." [27]

Multifocal breast cancer occurs when multiple tumors break off from the original tumor and start to grow separately from the original. All four of the young women cited in the report developed tumors with nearly identical morphology, while none of them had any known breast cancer risk. Each of the four cases is instructive as to what millions of unsuspecting women in the US could be facing:

- 1. Patient One (21 years old) kept her cell phone in her bra for several hours each day and developed extensive ductal carcinoma so aggressive that she suffered bloody nipple discharge. She was treated with a mastectomy.
- 2. Patient Two (21 years old) kept her phone in her bra eight hours a day for six years and developed multiple, large invasive lesions in her left breast. Doctors were forced to complete a mastectomy and her cancer was subsequently found to have spread to her lymph nodes and also to her bones.
- 3. Patient Three (39 years old) kept her cell phone in her bra for eight years, often using the GPS application while jogging. She developed six suspicious lesions in her breast. Mastectomy revealed metastasis to her lymph system.
- 4. Patient Four (39-year-old) kept her cell phone in her bra for ten years, often using a Bluetooth headset which kept the phone transmitting for hours each day. She developed four separate ductal carcinomas and mastectomy revealed lymph node metastatic disease.

What is striking about the four young women discussed in this study is not only the unusually young age at which they suffered multi-focal breast cancer, but also the relatively short incubation time of their cancers. Tobacco smoking typically takes 20-30 years to induce lung cancer. The latency period between asbestos exposure and cancer can be up to 40 years. But these four women developed cancer within a five to ten-year period of breast irradiation, just as many brain tumor victims are being diagnosed with head and neck malignancies after about ten years of Wi-phone irradiation.

The central question is this: out of millions of US breast cancer victims, are the four women cited in the California study the <u>only people in the nation</u> whose prolonged exposure to personal wireless devices has resulted in the development of aggressive breast cancer? How many women (and men) have died in the last twenty years without knowing that their breast cancer was initiated and promoted by wireless radiation exposure?

Dr. Devra Davis confirms that US regulatory and health agencies have every reason to know about the virulent cacinogenicity of Wi-technologies and she warns: "Experimental studies show that cell phone radiation accelerates the growth of breast cancer." [28] In fact, as early as 1982, medical researchers reported that RF/microwave radiation enhances the growth rate of spontaneous mammary tumors. [29]

Recent research confirms that female breast tissues are also highly susceptible to the damaging effects of ionizing radiation from X-rays, CT scans and mammograms, especially the new "superhot" 3D mammograms. By 2010, researchers at the Department of Energy's Berkeley National Laboratory announced: "Our work shows that radiation can change the microenvironment of breast cells and this in turn can allow the growth of abnormal cells with a long-lived phenotype that have a much greater potential to be cancerous." [30]

Even as medical science now urgently warns against prolonged body contact with radiating microwave antennas, Widevices are being forced upon even America's youngest school children. From a medical standpoint, this is sheer child abuse perpetrated by uninformed parents, complicit educators and the predatory Wi-radiation industry. Millions of young girls, perhaps the most radiation-sensitive of our population, keep Wi-tranceivers on or near their bodies for many hours each day, both in school and at home. The microwaves blazing into their bodies are powerful enough to transmit pulsed data for miles at the speed of light. This wave pollution is documented to inflict DNA damage equivalent to X-radiation. Therefore, these youngsters are continually "X-raying" their reproductive organs, which contain the primordial cells of their future offspring. They are also heavily X-raying their breast tissues. That the young girls of America are induced to inflict such potent Wi-damage upon their bodies suggests the possibility of a covert, nationwide sterilization agenda.



This horrendous situation is certain to result in a bountiful, nationwide breast cancer harvest for decades to come. The California doctors who issued the 2013 breast cancer report confirm that the developing breasts of young girls are especially sensitive to Wi-radiation. They state: "Children and young adults are now more likely to be using mobile devices and are among some of the heaviest users. This group is potentially at greatest risk of harm from EMR, as dividing tissue, such as that occurring in prepubertal breast buds, is more prone to the adverse effects of radiation."

The California cell phone/breast cancer report is an eye-opener: **READ IT HERE** Please share this warning with friends, daughters, granddaughters, and also with boys and men who carry their mobile devices in shirt pockets over the heart/chest area.

BRAIN TUMORS

- 1. An estimated 688,000+ people in the US are now living with a diagnosis of primary brain or central nervous system (CNS) tumors. [31]
- 2. Of these brain tumors, 63% are benign, 37% are malignant. [32]
- 3. In 2016, an estimated 23,770 Americans will be diagnosed with primary brain or central nervous system cancers and an estimated 16,050 will die from brain or CNS cancers. [33]
- 4. Thousands of additional Americans have brain tumors which are not yet diagnosed or which have <u>not been reported</u> to national registries. Many brain tumors remain clinically undetected until the terminal stage because, as they infiltrate the brain, they evade the body's defense forces with a special protein coating. [34]
- 5. After leukemia, brain tumors are the second most common cancer suffered by American children and they are the leading cause of death from childhood cancer. [35]



In 2009, an international team of neurosurgeons and other medical experts sponsored by the Australian National University gathered to review all available epidemiological evidence in peer reviewed medical literature. They concluded: "There is adequate epidemiological evidence to suggest a link between prolonged cell phone usage and ipsilateral brain tumor." Concerning powerful cordless phones used by millions of Americans, they stated: "It should be noted that cordless phones operate as transmitters and receivers like GSM cell phones....The average power output of cordless phones is comparable to cell phones...." [36]

Dr. Joel Moskowitz at UC Berkeley's School of Public Health announced in 2011 that his research team had "reviewed 23 case-controlled studies that examined the tumor risk due to cell phone use. Although as a whole the data varied, among the 10 higher quality studies, we found a harmful association between phone use and tumor risk. The lower quality studies, which failed to meet scientific best practices, were primarily industry-funded....It is time for our government to require health warnings...." [37]

Scientists with the Weizmann Institute of Science in Israel have announced that as little as ten minutes on a cell phone pulsing 875 megahertz radiation (GSM) can trigger changes in brain cells linked to cell division and cancer. The microwaves turn on a chemical switch related to a variety of cancers. One researcher told the media: "The significance lies in showing cells do react to cell phone radiation in a non-thermal way. We used radiation power levels that were around one-tenth of those produced by a normal mobile. The changes we observed were clearly not caused by heating." [38]

Shocking information is gleaned from a 2011 medical study published by cancer researchers with Mount Sinai School of Medicine: "We analyzed data from the Statistical Report: Primary Brain Tumors in the United States, 2000-2004 and 2007 cell phone subscription data from the Governing State and Local Sourcebook. There was a significant correlation between the number of cell phone subscriptions and brain tumors in nineteen US states....The very linear relationship between cell phone usage and brain tumor incidence is disturbing and certainly needs further epidemiological evaluation." [39]

Brain tumor incidence has been consistently linked to microwave phone exposure since the late 1990s, when European researchers began various epidemiological studies. Today we know that brain cancer risk from cell phone and cordless phone exposure is directly proportionate to: the number of hours and years of use, the intensity of radiated power from devices used on the brain, and the age of phone users when microwave exposure first began.

So far, the most fruitful studies have been conducted on European populations who began their wireless brain exposures beginning in the early 1980s. The following statistics are based on the use of older, less powerful wireless technologies, including 2G and analog phones. No one yet knows how the newer, more radiation-intensive 3G and 4G technologies--used by millions of Americans for hours each day--will impact future brain tumor incidence in USA. But the European studies reveal the following:

- 1. Adults who used cell and/or cordless phones for 10 years had at least a doubling of risk for brain tumors (200% risk).
- 2. The adult risk for brain tumors emerges after about 460 hours of cumulative wireless phone exposure. At about 2000 hours of cumulative exposure, Wi-phone users enter "high risk" status.

3. Children who begin irradiating their skulls before the age of 20 have a nearly five-fold (500%) risk for a brain tumor by the time they reach the age of 20-29. [40]

The brain tumor types linked to the use of wireless devices which infuse the head and neck with microwave radiation are:

GLIOMA TUMORS: These malignant and often aggressive cancers arise in the glial or supporting tissues of the brain and spinal cord. Gliomas are especially deadly, leaving most victims with little more than a year to live after diagnosis. A type of glial tumor called astrocytoma is the most common brain malignancy suffered by cell and cordless phone victims.

MENINGIOMA TUMORS: These usually benign tumors are the second most common tumors of cell phone users. These neoplasms arise in the protective membranes surrounding brain and spinal cord. Benign brain tumors exert pressure on brain tissues and require radical medical procedures. They are painful, disabling and, like malignant tumors, potentially lethal.

PITUITARY TUMORS: The Central Brain Tumor Registry of the United States (CBTRUS) maintains a comprehensive national record of reported central nervous system tumors. It confirms that, since 1995, there has been a statistically significant increase in benign brain tumors, including those of the pituitary gland. The pituitary lies deep in the brain and functions as the body's master gland. Pituitary tumors can cause over-production of a variety of hormones and unleash fatigue, menstrual irregularities, and weight abnormalities, among others symptoms. If they become large enough, these tumors can impact nearby optic nerves. A study of 790,000 women in the UK recently corroborated an elevated risk for pituitary cancer among cell phone users. This study found double the normal incidence of pituitary carcinoma in women who had used cell phones for at least five years and also a 60% increase in ten-year users. [41]

In 2013, the Hardell cancer research group in Sweden produced a case-control study of malignant human brain tumors diagnosed between 2007 and 2009. As with earlier studies, this research once again confirmed that RF/microwave radiation from both cell phones and cordless phones plays a role in both the initiation and promotion of cancerous brain tumors. [42]

The Hardell group published a second paper in 2013, which also pulls together numerous earlier human studies on brain cancer risks from Wi-devices. This analysis used the long-established Bradford Hill criteria for assessing causality to show that radiation exposure from mobile and cordless phones should rightfully be listed in the IARC Group 1A human carcinogen category, reserved for agents of deadly and undisputed risk, including ionizing radiation. [43]

The Hardell group has long confirmed that wireless phone usage at only 10+ years increases by 290% the risk of developing astrocytoma--the deadliest possible type of glioma brain tumor. A leading expert on this type of cancer is Dr. Leif Salford, a world-famous neurosurgeon with years of research on the effects of microwave exposure to the brain. He began looking for a cure for brain tumors in 1977, focusing on a horrendous variety of astrocytoma called glioblastoma multiforme (GBM). This is a common form of malignant tumor linked to cell phone radiation. It killed Ted Kennedy in 2009 and Vice President Joe Biden's son, Beau, in 2015. Most GBM victims die within 14 months of diagnosis.



Dr. Salford says of GBM, pictured above: "It grows like an octopus in the brain. It sends out its small guerrilla cell nests into the brain. And whatever you do, even if you take away the whole hemisphere right to the basal ganglia, there is always a continuing growth in the other half of the brain. It's a horrible disease." [44]

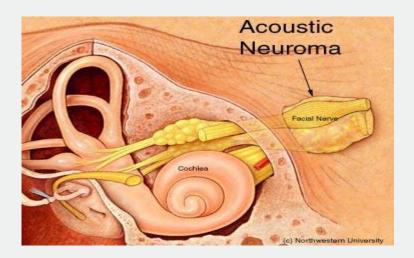
Leading oncologists tell us this: "Given that treatment for a single case of brain cancer can cost between \$100,000 for radiation therapy alone and up to \$1 million depending on drug costs, resources to address this illness are already in short supply and not readily available in either developing or developed countries." [45] Lloyd Morgan, director of the Central Brain Tumor Registry of the United States, projects that there could be over one million brain tumor victims in the USA by 2019. This staggering caseload would require 32-fold additional neurosurgeons. [46]

In 2014, a French cohort study published in the British journal Occupational and Environmental Medicine confirmed once again that heavy mobile phone use (over 800 hours of calls during a lifetime) is associated with the development of brain tumors. This study shows that brain cancer risks are tripled in individuals who use their phones more than 15 hours per month, or 180 hours per year. [47] American adult smart phone owners reportedly spend an average of one to two hours per day spiking their bodies with wave carcinogen, which nets them an exposure of 30-60 hours per month. [48] Forbes Magazine reported in 2013 that many technology-obsessed American workers use wireless communications devices an average of 7.5 hours a day, which computes to nearly 3,000 hours per year. [49] In a 2013 survey, twenty percent of parents admitted that their children spend at least five hours per day entertaining themselves with mobile devices. [50] What most Americans don't know is that every hour spent with irradiating Wi-devices can be considered a sort of "deposit" in a "tumor account" which silently accumulates brain damage for a very rainy day indeed.

Cell phones were introduced in the US in 1983. Digital cordless phones using the 900 MHz frequency range were first placed on the US market in 1994. According to available epidemiological statistics and numerical prognostications, America's great brain tumor harvest from two previous decades of wireless mania is expected to be reaped for decades to come. America's inevitable brain tumor epidemic will unfold in the same way as long-developing cancers from tobacco and asbestos: first a deceptive latency period, then a tsunami of devastating illness afflicting millions of victims.

ACOUSTIC NEUROMA TUMORS (ear/brain)

Each year, about 3,000 Americans are diagnosed with an acoustic neuroma (AN). [51] The meta-analysis of available medical studies reveals a 30% increased risk of AN after ten years of multi-lateral cell phone use and a 240% increased risk if the phone is used mainly on one side of the head (ipsilateral). [52]



Usually non-malignant, acoustic neuroma tumors develop on the eighth cranial nerve connecting the inner ear with the brain. One part of this nerve helps transmit sound, the other part sends balance information from ear to brain. AN tumors can cause hearing loss, vertigo, facial numbness, headaches and confusion. A large AN tumor highly impacts the brain stem or cerebellum, making it potentially deadly. The diagnosis and treatment for AN tumors includes the use of nuclear radiation and a variety of risky surgical procedures which often lead to irreparable deafness and/or permanent damage to facial nerves. AN tumors can recur after treatment.

The strong connection between cell phone/cordless phone radiation and acoustic neuroma tumors has been well-documented for over a decade. The same series of Swedish studies documenting the cell phone link to gliomas and meningiomas confirm a significantly elevated risk for acoustic neuroma tumors in wireless phone users. Several Interphone studies also document a significantly increased AN risk from holding transceiving mobile devices to the head.

- ♦ By 2004, researchers with the Karolinska Institute in Stockholm, Sweden, found a 400 percent increase in AN tumors on the side of the head where a microwave phone was held. [53]
- ♦ The 2009 UK study of 790,000 women found that those who used cell phones for more than ten years were 2.5 times more likely to suffer acoustic neuroma than non-phone users. [54]
- ♦ In 2010, researchers in Japan found that those who used cell phones for more than 20 minutes a day for at least five years had three times more acoustic neuroma than normal. [55]

As with the other varieties of microwave-induced tumors, the number of AN victims is expected to rise exponentially as America's great Wi-tumor harvest matures.

PAROTID GLAND TUMORS (oral)

In 2016, an estimated 48,330 Americans will receive a new diagnosis for cancer of the oral cavity/pharynx while 9,570 will die from advanced cancer in the oral cavity/pharynx areas. [56]

The U.S. government, with its huge investment in wireless infrastructure and its lavish tax revenues from wireless technologies, lacks incentive to research what percentage of America's oral cancers are related to the use of microwave devices pressed firmly against the skull and cheek for hours each day. So we must turn to foreign studies for the facts.



The connection between microwave phone exposure and oral cancers was closely examined in 2007 by a team of Israeli scientists representing a number of medical institutions. Joined by a representative of the International Agency for Research on Cancer (IARC), this team reported that those who regularly use mobile phones are fifty percent more likely to develop benign or malignant tumors in their salivary (parotid) glands than non-cell phone users. Tumor development is generally on the side of the head where the phone is held. [57]

By 2009, two other Israeli medical teams had explored the explosion of oral cancers among Israeli wireless phone users. Experts with a school of dental medicine conducted one of these studies and they concluded: "Parotid glands adjacent to the handheld mobile phone in use respond by elevated salivary rates and decreased protein secretion reflecting the continuous insult to the glands." [58]

Additional corroboration comes from China where researchers are now reporting an explosion of two varieties of parotid gland cancer found in cell phone users. One Chinese study noted in 2011 that the association between cell phone use and parotid gland cancers requires further investigation with large cohort studies recommended. *Microwave News* sums up recent Chinese statistics: "....Those who had used cell phones for over ten years had more than ten times the rate of epithelial parotid gland malignancies, the dominant type of cancer of the parotid gland. The risk rose to twenty times that of controls for mucoepidermoid carcinoma, the primary subtype of parotid gland cancer. Those who use a cell phone for more than two-and-

Finally in 2013, researchers at the Tel Aviv University announced results of a new oral cancer study which the *Times of Israel* called a "clear connection between cell phone use and higher risk of cancer." Researchers of this case-control survey documented "considerable oxidative stress on tissues and glands which are close to the cell phone in use." This stress, they said, "is linked to cell mutations which lead to the development of cancerous tumors." [60]

If Wi-radiation initiates and promotes cancer in parotid glands of the mouth, to what extent might it generate other types of mouth and throat cancers, such as those that develop in the larynx or the tonsils? Wireless phones held to the head irradiate at very close proximity to the throat area which, like the mouth, suffers "considerable oxidative stress" from perpetual microwave assault. Throat cancer rates are increasing yearly. The American Cancer Society reports that in 2016 there will be an estimated 13,430 new cases of laryngeal cancer and 16,420 new cases of pharyngeal cancer, with over 6000 deaths expected from these two types of throat malignancies. Also in 2016, 16,910 people will be diagnosed with cancer of the esophagus. Proper studies on the Wi-radiation connection to various types of throat cancers have not been conducted in the US, but informed observers often note that people they know with throat cancer are very fond of their cell and/or cordless phones.

Now we learn that infants can get a head start on future brain, mouth and throat malignancies thanks to uninformed parents who get suckered (pun intended) with invasive microwave antenna technologies <u>LIKE THIS.</u>

THYROID TUMORS

There are an estimated 534,973 Americans currently living with thyroid cancer, according to the National Cancer Institute (NCI). [61] NCI reports that the incidence of thyroid malignancy has been rising 6.4% each year over the last ten years. [62 The American Cancer Society estimates new thyroid cancer cases diagnosed for 2016 will be 64,300. [63] Compare this number to the 1999 figure of 17,000 new cases. A 2013 medical study says that better detection screening cannot explain this momentous increase. [64]



The thyroid is a butterfly-shaped gland that sits at the front of the neck just above the breastbone. It is the linchpin for the entire human endocrine system. It is central to human health and immunity. It produces three vital hormones needed for metabolism, digestion and reproduction. It helps regulate body growth, body weight, internal temperature, blood pressure, heart rate, bone strength, muscle tone and cellular use of calcium. There are some 59 human diseases linked to thyroid malfunction. Ask the 24 million Americans with clinical thyroid disease, many of them morbidly obese, what life is like when the thyroid gland can't do its job.

The thyroid is especially prone to the development of lumps, nodules, cysts and inflammatory tissues. No organ in the body is more sensitive to both ionizing (nuclear) and non-ionizing (microwave) radiation. Medical studies conducted in the 1980s and 90s confirmed that repeated irradiation of rats with microwaves radically decreased the functional activity of their thyroid gland. But only recently have medical reports begun to illuminate the multitude of pathological effects which RF/microwave radiation (cell phones, cordless phones and Wi-Fi) can inflict upon the human thyroid gland.

♦ In 2005, medical researchers used rats to confirm that 900 MHz radiation propagated by GSM cell phones decreases normal levels of thyroid stimulating hormone (TSH) as well as T-3 hormone (triiodothyronine) and T-4 hormone (thyroxin). [65]

♦ In 2009, researchers in Iran conducted a human case-control study to assess the effects of cell phone exposure on thyroid function. The study showed that both moderate and heavy cell phone users had statistically low levels of thyroid hormones T-3 and T-4, plus abnormally high levels of thyroid stimulating hormone (TSH), which is a pituitary hormone. The researchers postulated that the high TSH was compensation for low thyroid function and they concluded that mobile phone radiation has a deleterious effect on hormone balance of the entire pituitary, hypothalamus and thyroid axis. [66]

♦ In 2010, researchers in Turkey published a medical study of 900 megahertz radiation (GSM cell phones) confirming that normal thyroid hormone secretion is inhibited by microwaves. They stated: "...GSM mobile phones can cause pathological changes in the thyroid gland by altering the gland structure and by enhancing capase-dependent pathways of apoptosis (cell death)." [67]

There are four types of malignant thyroid tumors. In 2013, the cancer connection between wireless radiation and thyroid tissues surfaced with a vengeance, thanks to an impressive team of Israeli scientists affiliated with otolaryngology head and neck pathology. Their research was conducted in response to the meteoric increase of thyroid cancer during the last decade of frenetic cell phone usage by the population of Israel.

The research work of two separate Israeli studies focused on the effects of mobile phone radiation on human thyroid cells called thyrocytes. Thyrocytes are spherical follicle cells which absorb iodine and secrete critically important hormones. Among other findings, the researchers confirmed that mobile phone radiation causes human thyrocytes to proliferate (divide) at a much higher rate than non-irradiated cells. A lead researcher explained: "The thyroid gland is located in the neck, but the area is located the same distance from the ear as the regions of the brain where the (cancerous) growths have been diagnosed as being related to the use of (cellular) devices. This is a region that is not far from the device's radiation." [68]

The conclusion of one 2013 Israel study states: "Our results suggest a proliferative effect of non-ionizing electromagnetic radiation (NIER) on human thyrocytes, an effect that may link NIER exposure with potential carcinogenesis [cancer]." [69] The Israeli team behind this study presented their research to the World Thyroid Cancer Congress which met in Canada in 2013.

The crucial meaning of abnormal thyrocyte proliferation is further explained by the Cure Cancer Project: "Cancer is a disease characterized by abnormal cell proliferation and invasiveness. The combination of proliferation and invasiveness in an abnormal context defines the disease of cancer." [70]

In 2012, the discussion website Cancer Compass hosted an interesting blog exchange between two thyroid cancer victims. One blogger wrote: "....I find out that I had Stage III thyroid cancer. I begin to ask myself where did this come from. Then one night at home after surgery I realized something. You see I am 48-years-old and I am hearing impaired. I can't hear my cell phone when I take my hearing aids out at night so for the last 4 years I placed my phone on vibrate and laid it on my neck as I wait for my kids to text me when they are home at night...the exact same place where I had a 5.0 cancerous tumor. I just wondered what your thoughts were on this."

This tragic report was followed by this reply from another blogger: "I have thought of the same thing. My tumor was on the left [thyroid] lobe, always hold the cell to my left ear and have always kept it in the left front pocket of my scrubs. I'm a dentist." [71]

The National Cancer Institute's SEER chart of ten years reveals that *thyroid cancer incidence in the USA is heading STRAIGHT UP*. It is predictable that thyroid dysfunction and thyroid disease will continue to skyrocket with the unbridled advancement of wireless technologies, while most Americans remain ignorant of how these technologies can induce incredible pain, suffering and disability.

MELANOMA AND OTHER SKIN CANCERS

Despite decades of official warnings on excessive sun exposure, skin cancer incidence in the US is now multiple times higher per capita than that reported in the 1970s. [72] There are about 3.5 million cases of basal cell and squamous cell skin cancer cases newly diagnosed in the US each year. The US skin cancer epidemic also includes malignant melanoma. The American Cancer Society's 2016 estimate for new melanoma cases in the US is 76,380 with estimated melanoma deaths for the year at 10,130. [73] Melanoma in Connecticut alone has increased by 2000% since 1950. [74]



The medical world currently insists that it does not know the exact causes of skin cancer, although it advises against excessive UV sunlight and tanning beds. Many wireless device manufacturers now urge consumers to keep transceiving Widevices several centimeters away from the body. This is ludicrous since the use of most Wi-devices generally necessitates direct contact with the body, especially with the hands and the head. The vague warnings from the Wi-radiation industry indicate that radiation peddlers know something the American people don't and perhaps wish to cover their assets in the event of inevitable future litigation. However, such warnings are generally overlooked or ignored by millions of human test rats who use and store their microwave generators directly on their bodies for hours each day, year after year.

Melanoma is considered to be among the most dangerous of cancers. It can quickly metastasize through blood and lymph nodes to infiltrate organs, bones and brain. Evidence that melanoma is not exclusively related to sun damage is the fact that most melanomas reportedly occur on parts of the body normally covered by clothing.

Melanoma is documented to be linked to excessive, high-frequency electromagnetic radiation. In a series of studies spanning a decade, European researchers used national statistics from four Nordic countries, plus Iceland, to show that sudden and radical increases in melanoma occurred in those countries simultaneously with the introduction of frequency modulated (FM) radio and TV stations. FM radio stations typically broadcast radio frequencies in the 87-108 MHz band. Like the shorter wave microwave signals, frequency-modulated radio signals pass through everything and everyone. These long waves are deemed to be especially body-resonant. They can create standing waves near metal objects where people sleep. The European research showed that the higher the number of radio and TV towers surrounding a residential area, the higher the melanoma rates among that population.

Orjan Hallberg, a leading researcher for the Nordic study, explained: "Later studies by myself and others have concluded that a continuous disturbance of the immune and repair mechanisms from body-resonant radiation will end up increasing melanoma rates. It was also shown that countries that had not yet been covered by the radiation from FM broadcasting towers continued to have a low and stable melanoma rate...." [75] Other types of cancers are also linked to broadcast radiation. For example, a 1996 study showed an association between TV towers and childhood leukemia. [76]

Both Hallberg and leading Swedish researcher, Dr. Olle Johansson, echo a growing consensus that many human cancers develop from the combined assault of several factors: "We conclude that continuous disturbance of cell repair mechanisms by body-resonant electromagnetic fields seems to amplify the carcinogenic effects resulting from cell damage caused e.g. by UV radiation." [77]

A 1998 Canadian study of police officers exposed to radar guns (radiation in the microwave spectrum) documented increased rates of both testicular cancer (30%) and melanoma (45%) among exposed officers. [78] However, due to military-industrial pressures, the radar-cancer link has been hushed up in the United States.

Numerous studies and reports from other nations confirm that megahertz and gigahertz non-thermal microwaves cause myriad pathological skin reactions including: rashes, itching, redness and inflammation (erythema), burning sensation, severe oxidative stress, the flare-up of existing skin diseases (eczema, dermatitis and psoriasis), mast cell production (allergy) and rapid tissue aging. [79]

Researchers with the Experimental Dermatology Unit within the Department of Neuroscience at the Karolinska Institute in Sweden have confirmed --with numerous studies-- that human skin exposed to electromagnetic radiation invariably reacts in defensive and pathological ways. Dr. Olle Johansson, who has long researched electromagnetic hypersensitivity (EHS) at Karolinska, explains how humans suffer classical cutaneous radiation damage from electromagnetic exposures: "One of our major findings in EHS persons, as well as in exposed normal healthy individuals, was a remarkable numerical increase in mast cells and with a concomitant typical granular release, as if they would have reacted to an allergen, such as nickel or

pollen, or to radiation, such as X-ray or radioactivity. But these persons just had been subjected to the exposure from our new society's gadgets, such as computers and/or TV screens. And still they reacted with classical allergic reactions." [80]

So the question remains: How long can an organ like the skin try to defend itself against perpetual microwave irradiation before it loses the battle and degenerates into a malignant condition? Since the Wi-radiation industry is not required to demonstrate exactly how its brutal, pulse-modulated 3G and 4G microwave affects chronically exposed skin, concerned Americans are left to consult their common sense:

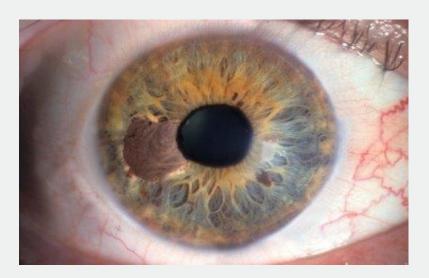
- ♦ There is universal acceptance that cancer begins with damaged DNA. Since REFLEX studies proved that microwave radiation from cell phones quickly and severely damages human DNA in the same way as X-ray radiation, this type of damage must certainly take place in the DNA of skin cells.
- **♦** Transmitting microwave devices can emit intermittent spikes of energy hot enough to burn cells deep within the brain. [81] Therefore, this same radiation could also burn-damage the skin, leaving it more vulnerable to additional UV and other subsequent damage.
- ♦ If microwave devices can induce cancer within the breast, brain, parotid glands and thyroid, these same devices logically have potential to initiate carcinogenesis within skin tissues.

In 2008, Finnish researchers exposed the skin of female volunteers to one hour of GSM cell phone radiation at a power density lower than legal in the US for cell phone exposure. Eight different skin proteins were found to be significantly altered. Two of the abnormal proteins were identical in all of the women. [82] Abnormal protein expression in human tissues plays a complex role in both cancer initiation and progression.

Sadly, adequate research on the Wi-connection to America's raging skin cancer epidemic has not been funded by the US government which is dedicated to promoting all things wireless. Meantime, the Wi-harvest is ripening. In 2012, the Mayo Clinic announced a dramatic increase in US skin cancers among young Americans under the age of 40, the demographic most besotted with wireless technologies. [83] Young women, especially, are being hit hard by melanoma. [84] It is guaranteed that the gruesome Wi-cancer story, involving pathology of the human skin, has many chapters yet to be written.

EYE TUMORS

Thousands of Americans, including children, suffer from eye tumors, either benign or malignant. In 2016, US eye cancer statistics include an estimated 2810 new primary eye cancers, a 25% increase over the 2004 eye tumor incidence. In 2016, an estimated 280 people will die from eye cancer. [85]



Human eye tissues are high in moisture content and therefore extremely vulnerable to all varieties of radiation. The US government has long been aware that eyes, breasts and testicles are organs most likely to absorb high amounts of wave energy. Human eyes are designated as radiation "hot spots" because they cannot efficiently remove heat deposited by microwaves.

Documented pathological effects on human eyes from RF/microwave radiation include: eye inflammation and redness, pain or burning in the eyes, a feeling of pressure behind the eyes, deteriorating vision, floaters, cataracts, and eye cancers. [86]

Dr. Henry Lai, renown bio-medical researcher at the University of Washington, has stated: "Another important area of research on morphological effects of RFR [radio frequency radiation] exposure, that could have important implications on cellular telephone use, is that on the eye. Damage to corneal endothelials, degenerative changes in the iris and the retina, and altered vision were reported in non-human primates after repeated exposure to RFR." [87]

Research published by Dr. Om Gandhi, working at the University of Utah, verified that wireless communications devices positioned directly against the head deliver hundreds of milliwatts of microwave radiation deeply into the human eye. [88] Cell phone radiation entering the eye oscillates (vibrates) eye tissues at millions or billions of times per second.

Most eye tumors involve the conjunctiva, retina, optic nerve or uvea (iris, ciliary body and choroid). The most common type of adult eye cancer is uveal melanoma, a type of skin cancer of the watery uveal layer, as seen in the photo above. In 2001, research at the University of Essen in Germany showed that people who regularly use microwave-emitting communication devices for at least ten years sustain a 320% higher risk of developing this kind of eye cancer. [89] Essen is a leading cancer treatment center. Here scientists examined 118 patients with uveal melanoma who had used mobile phones and/or walkie talkies. The statistics of these cancer victims were compared to those of 475 non-users who comprised the control group. This is the tally:

- **♦** Those who used wireless walkie talkies were over THREE TIMES more likely than non-users to develop eye cancer.
- ♦ Those who used cell phones were FOUR TIMES more likely than non-users to develop eye cancer. [also 89]

The medications, surgery and/or radiation treatments for eye tumors have many damaging side-effects, including damage to eyesight, and in some cases, facial mutilation. Yet, the US government unleashed wireless phone technology in the 1980s without conducting appropriate studies to determine the numerous ways in which near-field microwave devices, used on or near the body, can affect human eye tissues and vision. Now, millions of American test rats of all ages ARE the studies. The uninformed masses are condemned to discover for themselves--one pair of eyes at a time--the inevitable impairment and disease ramifications of pressing a transceiving microwave radio device to the head over the optic nerve and adjacent to the radiation-sensitive eye tissues.

Wi-Radiation Accelerates Cancer

The Wi-industry deploys a literal army of technicians who labor night and day from coast to coast to erect ever more towers and activate ever more RF/microwave antennas. Meantime, electromagnetic frequencies across the spectrum are documented to accelerate the growth of cancer tumors, in some cases exponentially. The very last thing needed by 14+ million Americans trying to survive cancer is chronic exposure to myriad sources of wireless radiation, which couples with the body to act as a sort of "tumor fertilizer."



Normally, malignant tumors follow a Gompertzian growth curve. The peak growth rate of a malignant tumor generally occurs before the tumor is even detectable. The growth fraction of a neoplasm starts at 100% with the first abnormal cell, then declines over time. The growth rate slows with time because, under normal conditions, tumors try to limit their own growth, although they are not completely successful at doing so. The slower the tumor growth, the better the prognosis for the cancer victim. By the time of diagnosis, the growth fraction is usually reduced to one to four percent, meaning that only one to four percent of the tumor is actively increasing. [90] However, under certain conditions, RF/microwave radiation can ramp up the growth fraction of tumors as high as 95% during the exposure and for a time afterwards. [91]

Molecular biologist David De Pomerai at the University of Nottingham in UK demonstrated that non-thermal radio waves can cause many negative biological effects. He noted a medical consensus that non-ionizing radiation, including microwaves, can indirectly damage human DNA by negatively affecting its repair system. If the DNA repair system does not work as well as it should, mutations can accumulate with disastrous consequences. De Pomerai confirmed that "cells with un-repaired DNA damage are likely to be far more aggressively cancerous." [92]

In 1993, FDA scientists discussed the need for additional research on the bio-effects of chronic, low-level RF/microwave radiation in regards to cancer progression. Of the available data they said: "This small and incomplete database strongly suggests that under at least some circumstances, these exposures do indeed accelerate the development of cancer by some unknown mechanism. Of approximately eight chronic animal experiments known to us, five resulted in increased numbers of malignancies, accelerated progression of tumors, or both." [93]

In 1995, Motorola-funded studies conducted by cancer researcher Jerry Phillips showed various negative DNA affects from cell phone microwaves. Phillips used a chemical to induce tiny tumors in animals, then looked at how the radiofrequency fields influenced those tumors: "It did appear that these fields could affect already initiated tumors," said Phillips. [94]

In 1997, the US Food and Drug Administration (FDA) conducted experiments on the growth of cancer cells and found that microwave radiation causes human cancer cells to multiply faster. Using a waveform identical to that used in digital cellular phones, at a power level approved by the FCC for human radiation absorption (SAR), FDA researchers induced rapid cellular proliferation in human glioblastoma (brain cancer) cells. [95]

In 2002, Italian scientists exposed leukemia cells in the laboratory to 48 hours of continuous radio waves at 900 MHz, the same frequency band used for GSM cell phone technology and smart meters. The exposure was set at a power density approved for public exposure by the FCC. The radiation initially killed some of the malignant cells. But after 48 hours, the microwaves activated three types of genes known to induce cancer cells to multiply. The surviving leukemia cells then began to divide aggressively. Cell biologist, Dr. Fiorenzo Marinelli who designed the study, reported: "In leukemia cells, the response is

always the same." [96] In 2016, another 60,140 Americans will be diagnosed with some form of leukemia, and an estimated 24,400 will die of leukemia this year. [97]

In 2011, Ukrainian scientists wrote in *Experimental Oncology*: "In this review we discuss alarming epidemiological and experimental data on possible carcinogenic effects of long-term exposure to low intensity microwave (MW) radiation. Recently, a number of reports revealed that, under certain conditions, the irradiation by low intensity MW can substantially induce cancer progression in humans and in animal models. The carcinogenic effect of MW irradiation is typically manifested after long-term (up to 10 years and more) exposure. Nevertheless, even a year of operation of a powerful base transmitting station (cell tower) for mobile communication reportedly resulted in a dramatic increase of cancer incidence among population living nearby. In addition, model studies in rodents unveiled a significant increase in carcinoma after 17-24 months of MW exposure both in tumor-prone and intact animals." [98]

Pulsing microwave technologies produce a variety of extremely low frequencies [ELF signals]. The ELF components ride in on the microwave carrier waves traveling to and from cell tower and rooftop antennas. Cell phones, smart phones and wireless tablets generate a complex mix of low frequency ELF components, long been documented to be tumor-promoting.

Dr. Wendell Winters, working at the University of Texas, found that cancer cells increase their rate of growth by several hundred percent in 24 hours when exposed to simple 60-hertz ELF household currents. [99] He found that ELF-exposed cells became increasingly resistant to the body's immune system. Subsequent studies have confirmed that ELF signals, just as with RF/microwave signals, can ramp up cancer cells to develop more aggressively malignant characteristics. [100] The US government allows human exposure of 60-hertz ELF at up to 904 milligauss. This medically-indefensible ELF exposure guideline, set for the convenience of industrial and military interests, is disastrous. Children trying to survive leukemia are documented to have poorer survival rates if their ELF exposure is between 1-2 milligauss, or above 2 milligauss in one study and above 3 milligauss in another study. [101] This is important information because leukemia is the top cancer-killer of American kids under the age of 20, while most American kids under 20 are now heavily Wi-addicted.

In 1998, the National Institute of Environmental Health Sciences (NIEHS) categorized (ELF) fields, such as those from power lines and electrical appliances, as "possible human carcinogens." In 2002, IARC did the same. [102] So the science confirms that wireless technologies, which excrete ELF plus microwaves, are double trouble.

Summary



Wi-radiation now saturates our environment. Recognizing the proclivity of Wi-radiation to initiate and proliferate cancer is critical to understanding why America's overwhelming cancer epidemic will absolutely continue to escalate. The topics discussed at this website should have been exhaustively researched by government and industry BEFORE Wi-technologies and Wi-devices were unleashed for frivolous and continuous use. Instead, consumer wireless devices have been exempted, by deliberate design, from proper pre-market scrutiny and post-market surveillance of health effects.

While critically-needed scientific data remains sparse, and while ethical research remains cruelly neglected, over 300 million Americans are currently volunteering their bodies for a mass "research project" on all of the cancer-related subjects discussed above. As with tobacco smoking, only after millions have died painfully and prematurely from excessive RF/microwave exposure, will the complete Wi-cancer picture finally come into focus. So far, we have enough science to understand these realities:

- ♦ Any nation which literally worships and daily advances high-frequency Wi-technologies-- exposing virtually everyone to compulsory and chronic doses of RF/microwave radiation-- will never achieve the conquest of cancer.
- **♦** A radiation-addicted population which habitually keeps and uses carcinogenic Wi-devices on the body will be a population riddled with a variety of aggressive tumors and blood cancers.

In 2016, Vice President Joe Biden convened the Cancer Moonshot Summit at Harvard University to beat the drums for "a cancer cure." A year earlier, Biden's son Beau had died from a pernicious brain tumor linked to cell phone radiation. New and expensive paths to diagnosis and treatment will not accomplish "the cure" until microwave-ridden America finally confronts its "new tobacco." Wise persons should withhold contributions to the cancer industry until US politicians and the medical establishment are ready to face the truth. Fundraising and cancer marathons by runners clad in "pink" won't cut it. The war on cancer cannot be won until America finally understands that the fat cats of wireless are, like their tobacco industry compatriots, raking in \$billions by selling disease, disability, deformity and premature death. Willfully ignorant Wiconsumers seem destined for a long, hard journey towards the ultimate realization that RF/microwave radiation is as potentially disease-causing as the prolonged use of tobacco and as ultimately lethal as exposure to asbestos and Agent Orange.

What informed Americans can do now -- in this perilous transition from darkness to the slowly dawning light -- is to refine their reasoning skills. If cell phones held to the brain can promote a variety of brain tumors, and if cell phones worn on the mammary glands can rapidly advance metastatic breast cancer, could not these same devices, habitually worn on other parts of the body, promote tumors in the liver, stomach, pancreas, bowel, bladder, prostate, testes, uterus and ovaries? Could not these same devices lay the genetic and epigenetic foundation for future malignancy within the microscopic ova, the delicate sperm, the radiation-defenseless human fetus?



Dr. David O. Carpenter of Harvard University, a physician who has worked in the area of electromagnetic fields and public health for over 18 years, says there is convincing and consistent evidence that RF/microwave radiation exposure over long periods of time increases risk of cancer and adversely affects the reproductive organs: "The evidence to date shows clearly that men that have cell phones in their pocket or on their belt, leaving it on for long periods of time, suffer reduced sperm counts. Nobody has really done the study yet, but I will predict that men who wear their cell phone in the on mode on their belt are going to be found to have increased risk for GI cancers, prostate cancer and other pelvic cancers."

[103] Therefore, women will also suffer increased risk for GI and pelvic cancers from continuous exposure to transceiving Wi-devices worn or used adjacent to their gut and reproductive areas. It's no surprise that, between the years 2004-2013, colorectal cancer cases in American adults under age 50 increased by 11.4 percent. A notable percentage of these cases were diagnosed as advanced cancers (stages 3 or 4). [104]

The late Dr. Neil Cherry, a dedicated New Zealand researcher on radiation and cellular biology, taught what Americans must fully understand before a dent can be made in the battle against the formidable US cancer epidemic: "Electromagnetic fields and radiation damage DNA and enhance cell death rates and therefore they are a Ubiquitous Universal Genotoxic Carcinogen that enhances the rates of cancer, cardiac, reproductive and neurological disease and mortality in human populations. Therefore, there is no safe threshold level. The only safe exposure level is zero, a position confirmed by a dose-response trend in epidemiological studies." [105]

Until this hard lesson is finally learned--Wi-worshippers will goose-step through a radiation minefield towards:

- devastating DNA damage
- radical hormone disruption
- painful immune deficiencies

These are the platforms from which mega-millions will ultimately board the great American cancer train.

Reference Notes with Additional Information

Please construe nothing at this website as medical advice.